

April 5, 1983

Mr. Mark E. Fitzsimmons
Love and Doran
Suite 605, Woodruff Building
P.O. Box 1455 SS3
Springfield, Missouri 65805

Re: 1003 S. Glenstone

Dear Mr. Fitzsimmons:

This office is responding to your letter of March 30, 1983, requesting documentation of responsibility of Webster Companies for the detection, monitoring, and treatment of flammable hydrocarbon products that entered the Springfield sanitary sewers.

The Water Pollution Control Section became aware of this incident on January 15, 1983, when the Springfield Fire Department responded to a report of gasoline vapors in the residence at 1704 East Grand. This property joins the west property line of 1003 South Glenstone. Gasoline vapors were detected in subsurface basement drains and a floor drain connected to the Springfield sanitary sewer. This office observed visible hydrocarbons and measured 100% of the Lower Explosive Limits (LEL), in the sewer main. At 100% LEL all that is needed for an explosion is a source of ignition.

The Water Pollution Control Section's investigation indicated that the Webster Companies service station at 1003 South Glenstone was leaking product and causing this problem. The reasons this conclusion was reached were:

1. Prior spill events at 1003 South Glenstone produced similar conditions in the sanitary sewer system.
2. The service station at 1003 South Glenstone is at the point of beginning of the affected sewer line.
3. The Webster station is the only petroleum marketing facility attached to the sewer line in question.
4. A field investigation by this Section of other nearby service stations indicated none had experienced a loss of product.
5. A field investigation of the geological site and known modifications indicated the 1003 South Glenstone area a more likely source for the contaminant.

1003 S. Glenstone

Mr. Mark E. Fitzsimmons

Page 2

April 5, 1983

6. After product lines at 1003 South Glenstone failed to pass a tightness test, excavation was undertaken to expose underground piping.

7. Excavation revealed a loss of integrity in the piping system due to anodic surface corrosion of a pipe nipple.

8. Exposing the area surrounding the tanks disclosed a product saturated backfill.

All of the above events and observations illustrate that the problem originated at 1003 South Glenstone. This office was in close contact with Jack Webster III throughout the episode. A close working relationship between Webster Companies, the Springfield Fire Department, and the Water Pollution Control Section resulted in the timely detection and correction of a hazardous situation.

This office was concerned because several blocks of sanitary sewer mains contained an explosive level of hydrocarbon vapors. Several private residences experienced product vapors inside their homes through connection to the City sewer main, while one home had vapors entering through its basement floor. Public buildings including the Smith-Glynn-Callaway Clinic encountered an explosive level of hydrocarbon vapors.

This office feels its efforts protected the citizens of Springfield as well as the health and property of those involved. If an incident would have occurred the liabilities would be quite severe.

We would appreciate prompt payment of the billing sent to Webster Companies. If you have further questions you should contact the City Law Department as we have referred it to them.

Yours truly,

Stephen Short
Water Pollution Control Inspector II
Surveillance & Enforcement

SS:js

cc: Robert Schaefer, P.E., Superintendent of Sanitary Services
Henry Cole, P.E., Sanitary Engineer
File (2)

1003 S. Glenstone

LAW OFFICES OF
LOVE & DORAN
SUITE 605 WOODRUFF BUILDING
P.O. BOX 1455 SSS
SPRINGFIELD, MISSOURI 65805

GARY A. LOVE
JAMES R. DORAN
MARK E. FITZSIMMONS

March 30, 1983

APR 1 1983
APR 1 1983

PHONE
(417) 862-8900

Mr. Stephen D. Short
Water Pollution Control Inspector II
Surveillance & Enforcement
Department of Public Works
830 Boonville Avenue
Springfield, Missouri 65801

Re: 1003 South Glenstone

Dear Mr. Short:

Please be advised that your letter of March 16, 1983, to Webster Oil Companies has been referred to my attention. Based upon the information that was supplied by the city, I cannot advise my client to pay this invoice. There is no documentation showing that Webster Oil was in any way responsible for it. If there is such documentation, please bring it to my attention.

If you have any questions, please feel free to contact me.

Very truly yours,

LOVE & DORAN

By: 
Mark E. Fitzsimmons

MEF/gls

1003 S. Glenstone

March 16, 1983

Mr. Jack Webster III, President
Webster Companies
2400 East Bennett
Springfield, Missouri 65804

Re: 1003 S. Glenstone

Dear Mr. Webster:

Attached is an itemized accounting of costs incurred by the Water Pollution Control Section in the detection, monitoring, and treatment of flammable hydrocarbon products that have entered the Springfield Sanitary Sewer System. The expenses to March 11, 1983, are hereby certified and forwarded to Webster Companies for payment, per Springfield City Code, Chapter 30-18. Payment should be made to the Director of Finance, City of Springfield, and remitted to:

Mr. Robert Schaefer
Superintendent of Sanitary Services
Room 210, City Hall
830 Boonville
Springfield, Missouri 65802

The totals from the detailed accounting are as follows:

Personnel	\$ 943.79
Equipment	72.10
Materials	<u>2,445.42</u>
	\$3,461.31

Due to the nature of the problem, further action may be required to protect the health, life, and property of those affected by the migration of lost product.

If we can be of any assistance or answer any questions, please do not hesitate to call 864-1924.

For Robert R. Schaefer, Superintendent of Sanitary Services, Department of Public Works.

Yours truly,

Stephen D. Short
Water Pollution Control Inspector II
Surveillance & Enforcement

cc: Robert R. Schaefer, P.E., Superin. of Sanitary Services
Fred Fantauzzi, Director of Finance
Dale Bittle, Chief Fire Marshal
File (2)✓

1003 S. Glenstone

PERSONNEL COSTS

Date	Employee	Regular Hours	Overtime Hours	Rate	Charge
1/15	Dennis Hahn	1.0		\$10.57	\$ 10.57
1/16	Steve Short		6	13.70	82.20
1/16	Dennis Hahn	1.0		10.57	10.57
1/18	Randy Lyman	1.0		16.41	16.41
1/18	Steve Short	1.0		13.70	13.70
1/19	Randy Lyman	1.0		16.41	16.41
1/19	Steve Short	1.0		13.70	13.70
2/13	Gene Pabst		6	16.41	98.46
2/13	Dennis Hahn	2.0		10.57	21.14
2/16	Randy Lyman	6.0	1.5	16.41	123.08
2/16	Steve Short	6.0	1.125	13.70	97.61
2/16	J. D. Slaughter	2.0	1.125	13.70	42.81
2/16	Bob Corson	2.0	1.125	16.41	51.28
2/16	Karen Chandler	2.0	1.125	13.03	40.72
2/17	Randy Lyman	2.0		16.41	32.82
2/17	Steve Short	2.0		13.70	27.40
2/18	Randy Lyman		.75	16.41	12.31
2/19	Randy Lyman		6	16.41	98.46
2/23	Randy Lyman	1.0		16.41	16.41
2/23	Steve Short	1.0		13.70	13.70
2/28	Steve Short	1.0		13.70	13.70
3/2	Randy Lyman	2.0		16.41	32.82
3/2	Steve Short	2.0		13.70	27.40
3/7	Randy Lyman	1.0		16.41	16.41
3/7	Steve Short	1.0		13.70	13.70
					<u>\$943.79</u>

1003 S. Gloustone

EQUIPMENT COSTS

Date	Equipment No.	Hours	Rate	Cost
1/15	T3-48	1.0	\$12.25	\$12.25
1/16	T3-48	1.0	12.25	12.25
1/18	P2-22	6.0 miles	.35	2.10
1/19	P2-22	6.0 miles	.35	2.10
2/13	T3-48	2.0	12.25	24.50
2/16	P2-22	12.0 miles	.35	4.20
2/16	P2-24	6.0 miles	.35	2.10
2/16	P2-15	6.0 miles	.35	2.10
2/17	P2-22	6.0 miles	.35	2.10
2/23	P2-22	6.0 miles	.35	2.10
2/28	P2-22	6.0 miles	.35	2.10
3/2	P2-22	6.0 miles	.35	2.10
3/7	P2-22	6.0 miles	.35	<u>2.10</u>
				\$72.10

1003 S. Glenstone

MATERIALS

Date	Hours	Water at 100 gpm
2/16	7.5	
2/17	24	
2/18	24	
2/19	24	
2/20	24	
2/21	24	
2/22	24	
2/23	24	
2/24	24	
2/25	24	
2/26	24	
2/27	24	
2/28	24	
3/1	24	
3/2	10.5	
		= 1,980,000 gallons
		2,647 ccf
	Total Materials	\$2,445.42

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF Webster Oil File

DATE 3-7-83

DEPARTMENT

Gene Pabst and I inspected the manholes in Kentwood St. Rainfall over the weekend had caused more infiltration in the 6" line, but no gasoline could be observed or monitored. The M.H.'s were left open for further observation. I had heavier barricades put out by the Service Center over the weekend.

SIGNED J.R.L.

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____

DATE 3/3/83 _____

DEPARTMENT _____

Randy Lyman and Steve Short turned off the fire hydrant water at Kentwood and Grand. The L.E.L.'s in the manholes appeared to be no problem after the water was turned off at 10:30 A.M. on 3/2/83. The water was turned on at 4:30 p.m. on 2/16/83, with a discharge of 100 g.p.m. This equals 2647 c.c.f. with a charge of \$1,227.80 for water and \$1,217.62 for sewer. The total of \$2,445.42 will be forwarded to Webster Oil Co.

SIGNED _____ SDS
1003 S. G. Ginstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

2/28/83

DATE

FILE

ATTENTION OF

DEPARTMENT

Steve Short inspected the progress at Webster's 66. There is still a slight leak at a flange on the north tank. There was a 90% L.E.L. in Mr. Wingo's basement drain. No L.E.L.'s were noted in the Kentwood manholes.

SDS

SIGNED

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

DATE February 23, 1983

ATTENTION OF FILE

DEPARTMENT _____

Randy Lyman and Steve Short inspected 1704 E. Grand to check for gasoline vapors. We detected 100% L.E.L. in the basement floor drain and in the sub-surface drains. Jack Webster III and the Fire Marshal's office was informed of the reading. We also installed a gate valve on the fire hydrant on Kentwood. Ray Toates requested we install a valve and keep a record of water used. The water was estimated at 100 g.p.m. by using a water meter test and sewer depth measurements.

SIGNED S.D.S. & J.R.L.

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____

FILE _____

DATE 2-16-83 _____

DEPARTMENT _____

Randy Lyman and Steve Short received a complaint from Mr. Bengsch at Smith-Glynn-Callaway Clinic, 1211 S. Glenstone, concerning gasoline odors in the building. The problem started Saturday the 12th and subsided the 13th. Building Maintenance crews found a dry trap that appeared to be the point of entrance. Mr. Bengsch stated that part of the Clinic is tributary to the sanitary sewer main in Glenstone, while most of the south addition is connected to the Kentwood Street sewer. Mr. Bengsch observed gasoline in another part of the building on the 16th. When we first entered the basement area a 10%-20% L.E.L. was noted at the floor level. Our investigation revealed abandoned plumbing runs and leaking plugs in the basement area. Some were emitting gasoline vapors. In a basement utility corridor bordering the west foundation wall of the newest multi-story addition, we found a six inch cast iron sewer. Where the pipe exits the foundation vapors at 100% L.E.L. were noted. The utility corridor slopes toward the mechanical room which is about 20 feet further south of the sewer pipe noted above. This office contacted Fire Marshall Gourley and he also inspected the Clinic. After inspection of the building we observed 100% L.E.L. in M.H. 28, Wye Map S-13, located in Kentwood Street. At about 4:30 P.M. the Clinic was reinspected by this office, Fire Marshall Gourley, and plumbing inspectors Mitchell and Shanholtzer. The owners were advised to caulk around the six inch cast iron sewer pipe in the utility tunnel and seal any openings to the building sewer that would allow vapors to escape. Manhole lids were removed and the openings barricaded at M.H.'s 28, Wye Map S-13, M.H.'s 16, 17, 18, 51, and 52, Wye Map R-13. With approval of Fire Marshall Gourley a 2½ inch fire hose was used to flush the sewer at M.H. 52. The hose ran all night. The sewer flusher worked in Kentwood but could not lower the L.E.L. level. Since the flusher did not help and the vapors were at 100% L.E.L., their operation was terminated. Fire Marshall Gourley was to reinspect the Clinic after closing, that evening.

J. Randall Lyman

SIGNED _____ Stephen D. Short _____

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF Webster Oil
DEPARTMENT Re: 1003 S. Glenstone

DATE 2-15-83
5:45 p.m.
At Home

Jack Webster III called me and said they will have Stoddard Equipment Company commence work 2-16-83. Initial work will involve valving the various product lines to facilitate continuance of operation during construction. Mr. Webster indicated that several years ago, many tanks were installed with a flex-pipe connected to the service lines. He feels that this may be the problem. He wants to check this possibility, and if it appears to be the problem he wants us to inspect and decide if replacement of this flex-line will be sufficient to satisfy our requirements at this time.

Cost Estimates By Mr. Webster:

Complete replacement of all lines = \$5000-\$7000
Valving and flex-pipe replacement = \$600-\$1000

cc: Robert R. Schaefer, Superintendent of Sanitary Services
Dale Bittle

J. Randall Lyman
Surveillance & Enforcement
SIGNED _____

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF Webster Oil
DEPARTMENT 1003 S. Glenstone

DATE 2-16-83
10:30 A.M.

Meeting Attendance:

Robert R. Schaefer, Superintendent of Sanitary Services
Dale Bittle - Chief Fire Marshal
Jack Webster III - Webster Companies
Steve Short - Surveillance & Enforcement
Randy Lyman - Surveillance & Enforcement

Mr. Jack Webster informed us that Stoddard Equipment Company had air tested the product lines at 1003 S. Glenstone on Friday, February 11, 1983. These tests indicated a slight loss of pressure on the unleaded lines and a significant loss of pressure on the regular lines. Mr. Webster said the islands have been struck by automobiles on more than one occasion and this could have loosened couplings on the entire piping system. He indicated that Webster Companies would replace all lines over the weekend following, (Feb. 20, 1983). Subsequent monitoring by the City will determine if this will be sufficient. We agreed that a Kent-Moore test will not be required at this time. We strongly recommended a recovery system be instituted in conjunction with product line replacement construction activities.

Mr. Webster indicates that inventory records reveal a $\frac{1}{2}\%$ loss in relation to 60,000 gallons throughput at the 1003 S. Glenstone location. We will keep in touch with Mr. Webster to determine progress at it develops.

J. Randall Lyman

SIGNED Stephen D. Short

1003 S. Glenstone

CITY of
SPRINGFIELD



February 9, 1983

Mr. Jack Webster III, President
Webster Companies
2400 E. Bennett
Springfield, MO 65804

Re: 1003 S. Glenstone

Dear Mr. Webster:

As you are aware, the area in which a service station owned by Webster Companies at 1003 S. Glenstone has experienced some problems in the past and is still experiencing problems, with gasoline entering the City sanitary sewer. The City has determined that on occasion hydrocarbon vapors can be detected in the sanitary sewer to which the 1003 S. Glenstone address is connected. On occasion hydrocarbon vapors have been detected in quantities reaching 100% of the lower explosive limit (L.E.L.). A history of the problem will follow.

On October 16, 1981 the Springfield Fire Department contacted the Surveillance and Enforcement Section of the Public Works Department concerning apparent gasoline vapors in a basement of a residence in the 1100 block of South Kentwood. The presence of gasoline vapors was confirmed and precautionary measures were instituted by the property owner. The investigation by Surveillance and Enforcement then proceeded by monitoring the presence of hydrocarbon vapors and visual observation upstream in the City sanitary sewer and narrowed the source to a section of 6 inch sewer line serving 1700 E. Grand, 1704 E. Grand, 1003 S. Glenstone, and 1023 S. Glenstone. This section of line runs west from the 1003 S. Glenstone address to an 8 inch line in Kentwood Avenue. A visual inspection indicated the presence of gasoline on the surface of the flow from this 6 inch line.

The station attendant at 1003 S. Glenstone was contacted to determine if any gasoline had been deposited into any drains at the facility which could be tributary to the sewer line. He indicated that there had not, and inspection revealed this to be true. The attendant called Webster Companies' office for an inventory check for any loss of product and your records indicated no losses. You were contacted and indicated that you knew of no loss of product at this 1003 S. Glenstone location but that you would have Stoddard Equipment Company perform air tests on the underground tanks and lines at this station.

Department of Public Works

830 Boonville Avenue
Springfield, Missouri 65801
(417) 864-1900

1003 S. Glenstone

Mr. Jack Webster III, President

Page 2

February 9, 1983

On October 21, 1981 City personnel observed the air test procedure at 1003 S. Glenstone. At this time it appeared that unleaded gasoline may have been escaping over a long period of time from a pump port that had not been plugged; probably from the time of installation. Retesting was to follow the following day.

Stoddard Equipment returned and retested the entire fuel system at this station. A written notice of their findings was sent to the City. This notice indicated that after the missing $\frac{1}{4}$ inch pump port was plugged, the entire fuel system showed no leaks. Subsequent monitoring in the City sewer for several months following indicated that the problem was dissipating as time elapsed. Monitoring frequency was also decreased as the L.E.L. indications appeared to decrease in magnitude in the City sewer line. It was our feeling in mid-1982 that the problem and its source may have been corrected.

However, on October 20, 1982, Surveillance and Enforcement was contacted by Mr. Perry Wingo in regard to gasoline vapors being experienced in his father's home at 1704 E. Grand. City personnel arrived at that address and monitored a 100% L.E.L. in a basement floor drain tributary to the 6 inch sewer line aforementioned. City personnel also observed very strong gasoline odors in the living portion of this home. Three subsurface groundwater drains were also found to terminate in the basement floor drain fixture. The presence of gasoline vapors was confirmed in the southeast groundwater drain. Fire Marshal Jim Dancy was called to the scene. Mr. Dancy agreed that gasoline vapors could be entering this residence via these groundwater drains in addition. The drain was plugged and a vapor-tight barrier was placed over it. The vapors were undetectable in the home a few hours later.

Surveillance and Enforcement personnel contacted you on October 20, 1982, and informed you of the problem. You then offered again to have Stoddard Equipment air test the tanks and lines at 1003 S. Glenstone. On October 25, 1982, you reported to Surveillance and Enforcement that the tanks tested out sufficiently but that Stoddard could not hold pressure on two of the product lines. You indicated that the island dispensers had been recently replaced and it appeared that the wrong type of pipe thread sealant had been used in that installation. You apparently did not feel that the integrity of the lines was in question and did not authorize any further testing. Continued monitoring of the sewer lines by Surveillance and Enforcement indicated reduced presence of gasoline vapors in the City sewer during the several weeks following.

On January 15, 1983, the situation apparently again worsened as the Fire Department was called to 1704 E. Grand Street. Surveillance and Enforcement was notified by the Fire Department of the situation. The City sewer line was flushed by a high-velocity sewer flusher. On January 16, 1983, a 100%

1003 S. Glenstone

Mr. Jack Webster III, President

Page 3

February 9, 1983

L.E.L. was monitored in the City sewer. Again, the sewer flusher was used. A 20% L.E.L. was measured in the 1704 E. Grand basement floor drain after the City sewer was flushed. On January 18, 1983, a 100% L.E.L. was measured in the City sewer. You were again contacted and agreed to have the fuel system at 1003 S. Glenstone checked. At this writing the results of such test have not been completed or remitted to the City.

Because of extreme liability on the part of your company, because a leak was confirmed on October 21, 1981, and due to the repeated reoccurrence of the problem since that time, it is our feeling that a trenching or digging operation or some type of excavation must be performed on the property at 1003 S. Glenstone so as to reveal if any hydrocarbon is in the soil or groundwater on your property, has left your property, or is still leaving your property. If hydrocarbon is found in such an operation, a recovery system must be constructed. A copy of some related literature we have acquired is enclosed.

In our opinion, due to many factors determining the migration of hydrocarbons in soil or groundwater, it would be in the best interest of your company to acquire the services of a professional with experience in the field of soils and groundwater to determine the extent of any contamination, develop any recovery program, and conduct any recovery operations.

Furthermore, in our opinion, a Kent-Moore tightness test should be performed on the tanks and lines at this location. This test is apparently the only test acceptable by the American Petroleum Institute for determining the integrity of gasoline storage tanks and lines. A list of companies which can perform the Kent-Moore test is enclosed. Such a test would be of assurance to your company that a continuing leak would not complicate any hydrocarbon recovery operation.

The City of Springfield is hereby requesting a meeting with you or a representative of Webster Companies to take place on or before Tuesday, February 15, 1983, to discuss:

- (1) The extent and severity of the problem being encountered and liability on the part of Webster Companies.
- (2) The current status of the integrity of the fuel system at 1003 S. Glenstone.
- (3) The plan of action on the part of Webster Companies to determine the extent of spilled hydrocarbon on or from your property.
- (4) The steps to be taken by the Webster Companies in any collection, recovery, and disposal operation performed.

1003 S. Glenstone

Mr. Jack Webster III, President
Page 4
February 9, 1983

(5) The timetable for achieving the requirements of the City of Springfield.

Please contact this office as soon as possible to set a time and place for this meeting. If we may be of assistance in the meantime, please do not hesitate to call at 864-1924.

Very truly yours,

J. Randall Lyman
Water Pollution Control Inspector III
Surveillance & Enforcement

JRL:js

ccs: David G. Snider, Director of Public Works
Robert R. Schaefer, Superintendent of Sanitary Services
Jack Newman, Director of Health
Bill Penland, Fire Chief
Mr. E. E. Wingo

1003 S. Glen Stone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____

DATE _____ 2-14-83 _____

DEPARTMENT _____ Webster Oil _____

Gene Pabst was paged by Fire Department @ 5:15 P.M. on 2-13-83 regarding gasoline odors at 1019 S. Kentwood. Gene had the City sewer flushed @ 5:45 P.M. (Wye Map R-13, M.H. 26-27, 22-25, and 25-26). Fire Marshal Gourley indicated they measured a 25 % L.E.L. in M.H.'s in Kentwood Street. They could get no L.E.L. reading in the home at 1019 S. Kentwood, only odors. Fire Marshals indicated a 80%-90% L.E.L. in M.H. #27, R-13.

SIGNED _____ J.R.L. _____ S & E _____

1003 S. Glenstone

CITY of
SPRINGFIELD



January 21, 1983

JAN 24 1983

Handwritten signature: Rand Lymen

Mr. E. E. Wingo
1704 E. Grand Street
Springfield, MO 65804

Dear Mr. Wingo:

As you are aware, the area in which you reside has experienced some problems in the past, and is still experiencing problems, with gasoline odors venting back through connections to the City sanitary sewer. The City has determined that on occasion hydrocarbon vapors can be detected in the sanitary sewer to which your residence is connected and that on occasion has been detected in quantities reaching 100% of the lower explosive limit (L.E.L.). A 100% L.E.L. reading is an indication that the air to hydrocarbon mixture is suitable for an explosion hazard if given an ignition source. Any lower L.E.L. reading would indicate improper conditions for an explosion to occur. A history of the problem and corrective actions taken will follow.

On October 16, 1981, the Springfield Fire Department contacted the Surveillance & Enforcement Section of the Public Works Department about apparent gasoline odors in a basement of a residence in the 1100 block of South Kentwood. The presence of gasoline odor was confirmed and precautionary measures that should be taken were explained to the owner of the property. These measures were instituted by the owner and the potential hazards in his home were greatly reduced. The investigation by Surveillance & Enforcement then proceeded by monitoring the presence of hydrocarbon vapors upstream in the City sanitary sewer and narrowed the source to a section of 6 inch sewer line serving 1700 E. Grand, 1704 E. Grand, 1003 S. Glenstone and 1023 S. Glenstone. This section of line runs east to west along your south property line. A visual inspection indicated the presence of gasoline on the surface of the flow from this 6 inch line.

The 1003 S. Glenstone address is a Phillips 66 Service Station owned by Webster Oil Company. The station attendant was contacted to determine if any gasoline had been deposited into any drains at their facility which could be tributary to the sewer line. He indicated that there had not, and inspection revealed this to be true. The attendant called Webster Oil Company for an inventory check for any loss of product and their records indicated no losses. Mr. Jack Webster III of Webster Oil Company was contacted by the City. Mr. Webster indicated that he knew of no loss of product at this 1003 S. Glenstone location but that he would have Stoddard Equipment Company perform air tests on the underground tanks and lines at this station.

Department of Public Works

830 Boonville Avenue
Springfield, Missouri 65801
(417) 864-1900

Handwritten note: 1003 S. Glenstone

Mr. E. E. Wingo
January 21, 1983
Page -2-

On October 21, 1981, City personnel observed the air test procedure at 1003 S. Glenstone. At this time it appeared that unleaded gasoline may have been escaping for a long period of time from a pump port that had not been plugged; probably from the time of installation. Retesting was to resume the following day.

Stoddard Equipment returned and retested the entire fuel system at this station. A written notice of their findings was sent to the City. This notice indicated that after the missing 1/4 inch pump port was plugged, the entire fuel system showed no leaks. Subsequent monitoring in the City sewer for several months following indicated that the problem was dissipating as time elapsed. Monitoring frequency was also decreased as the L.E.L. indications appeared to decrease in magnitude in the City sewer. It was our feeling in mid-1982 that the problem and its source may have been corrected.

However, on October 20, 1982, Surveillance and Enforcement was contacted by Mr. Perry Wingo. He indicated that gasoline odors were being experienced in your home at 1704 E. Grand. City personnel arrived at approximately 12:00 noon and monitored a 100% L.E.L. in a basement floor drain tributary to the 6 inch sewer line aforementioned. City personnel also observed very strong gasoline odors in the living portion of your home. Three subsurface groundwater drains were also found to terminate in the basement floor drain fixture. The presence of gasoline vapors was confirmed in the southeast groundwater drain. Fire Marshal Jim Dancy was called to the scene. Mr. Dancy agreed that gasoline vapors could be entering the residence via these groundwater drains in addition. Mr. Dancy advised plugging the drain and placing a vapor-tight barrier over the floor drain. Mr. Roy Warren, your son-in-law, agreed to do this. Later in the day it was found that the drain had been sealed and the vapors had been eliminated or were undetectable in your home. A 70% L.E.L. was monitored in the City sewer concurrently.

Surveillance and Enforcement personnel contacted Mr. Jack Webster III on October 20, 1982, and informed him of the problem. Mr. Webster offered to again have Stoddard Equipment air test the tanks and lines at 1003 S. Glenstone. On October 25, 1982, Mr. Webster reported to Surveillance and Enforcement that the tanks tested out sufficiently but that Stoddard Equipment Company could not hold pressure on two of the product lines. Mr. Webster indicated that the island dispensers had been recently replaced and it appeared that the wrong type of pipe thread sealant had been used in that installation. He apparently did not feel that the integrity of the lines was in question and did not authorize any further testing, according to a Stoddard official.

In addition, Surveillance and Enforcement personnel became aware that there were buried gasoline tanks on the north side of Grand at Ming Auto Center, 959 S. Glenstone. These tanks are no longer in use as they are a remnant from a previous service station operation. Surveillance and Enforcement personnel found on inspection that two tanks appeared to be empty, one had a few inches of gasoline, and one had 3 feet of water and 3 inches of gasoline. Fire Marshal Thurman was advised of the situation on October 22, 1982. Mr. Thurman indicated that the Fire Code calls for removal or filling with sand of fuel tanks when taken out of service. Mr. Thurman indicated that the Fire

1003 S. Glenstone

Mr. E. E. Wingo
January 21, 1983
Page -3-

Department would initiate compliance action to meet that requirement. On occasion, some presence of gasoline vapors have been detected in a City sewer line on the north side of Grand, directly across the street from your residence. This sewer line has no immediate physical connection the sewer line which serves your home. Continued monitoring of the sewer lines by Surveillance and Enforcement indicated little or no presence of gasoline vapors in the vicinity of your residence during the several weeks following.

On January 15, 1983, the situation apparently again worsened as the Fire Department was called to your residence. Surveillance and Enforcement was notified by the Fire Department of the situation. The City sewer line was flushed by a high velocity sewer flusher. This measure usually is only a very temporary measure and in some instances does not help at all. On January 16, 1983, a 100% L.E.L. was monitored in the City sewer. Again the sewer flusher was used. A 20% L.E.L. was measured in your basement floor drain after flushing. On January 18, 1983, a 100% L.E.L. was measured in the City sewer; again no reading could be obtained in your basement drain. Mr. Jack Webster III was again contacted and asked to have the fuel system at 1003 S. Glenstone checked. Mr. Webster agreed to do so. At this writing the tests have not been completed. On January 20, 1983, the L.E.L.'s in the City sewer had dropped to 50-55% of the L.E.L.

Due to the repeated reoccurrence of this problem; Surveillance and Enforcement, pending the outcome of air testing, is planning to require that Webster Oil Company initiate trenching and excavation along their property line at 1003 S. Glenstone. This action could reveal if any gasoline is in the soil on the Webster property and if so, could additionally reveal any movement of gasoline from their property onto yours or into the City sewer system at the rear of your property. A collection system could be constructed on the Webster property for the separation and recovery of any gasoline in the groundwater.

For your information, the following opinions of this office are offered:

- (1) Results of air testing of fuel systems of the Webster Station or any other station in the vicinity may not be absolute proof that the gasoline causing the current problem is from a specific source in particular.
- (2) Excavation or trenching could reveal gasoline in the soil on the Webster property. An excavation on any property that has had a service station operating on it for a number of years could reveal the presence of gasoline in the soil. Determining direction of movement of the gasoline can sometimes be very difficult to prove.
- (3) The City has been involved in scores of similar problems throughout the metropolitan area served by City sewer. In many instances no evident source for the problems could be found. Suppositions have ranged from rumors of former, nearby service stations that have been out of business for 30-40 years, to rumors of vehicular accidents 15-20 years ago in which spillage occurred. In most cases there are not sufficient records to either support or dispel the rumors.

1003 S. Glenstone

Mr. E. E. Wingo
January 21, 1983
Page -4-

- (4) If the aforementioned investigative tools prove to be successful and the source of the problem can be found and corrective action is taken, please keep in mind that reoccurrences of this problem could develop from time to time in the months or years ahead. Such reoccurrences may result from fluctuations in the height of the water table. This can vary due to frequency, amount and intensity of rainfall or precipitation. Also, due to the unknown extent, volume and path of movement of the gasoline in soil in the vicinity, it is difficult to predict if, when, or where it may pose a problem again. The varied disturbances of the soil through the years in an urban setting add to the complexities in a problem such as this.

However, please be advised that the City of Springfield is doing and will continue to do all within its power and jurisdiction to try and protect you and your property from any potential hazards like the one you are now experiencing. We will keep you informed of progress as it develops.

If we may answer any questions, please do not hesitate to call.

Very truly yours,



David G. Snider, P.E.
Director of Public Works

RRS:cc

ccs: Randy Hall, City Councilman
Don G. Busch, City Manager
Jack Newman, Director of Health
Bill Penland, Fire Chief
Bob Schaefer, Superintendent of Sanitary Services

1009 S. Glenstone

Mr. E. E. Wingo

1704 East Grand Street

Springfield, MO 65804

Dear Mr. Wingo:

As you are aware, the area in which you reside has experienced some problems in the past and is still experiencing problems with gasoline odors venting back through connections to the City sanitary sewer. The City has determined that on occasion hydrocarbon vapors can be detected in the sanitary sewer to which your residence is connected and that on occasion has been detected in quantities reaching 100% of the lower explosive limit (L.E.L.). A 100% L.E.L. reading is an indication that the air to hydrocarbon mixture is suitable for an explosion hazard if given an ignition source. Any lower L.E.L. reading would indicate improper conditions for an explosion to occur. A history of the problem and corrective actions taken will follow.

On October 16, 1981 the Springfield Fire Department contacted the Surveillance & Enforcement Section of the Public Works Department about apparent gasoline odors in a basement of a residence in the 1100 block of South Kentwood. The presence of gasoline odor was confirmed and precautionary measures that should be taken were explained to the owner of the property. These measures were instituted by the owner and the potential hazards in his home were greatly reduced. The investigation by Surveillance & Enforcement then proceeded by monitoring the presence of hydrocarbon vapors upstream in the City sanitary sewer and narrowed the source to a section of 6 inch sewer line serving 1700 E. Grand, 1704 E. Grand, 1003 S. Glenstone and 1023 S. Glenstone. This section of line runs east to west along your south property line. A visual inspection indicated the presence of gasoline on the surface of the flow from this 6 inch line.

1003 S. Glenstone

The 1003 S. Glenstone address is a Phillips 66 Service Station owned by Webster Oil Company. The station attendant was contacted to determine if any gasoline had been deposited into any drains at their facility which could be tributary to the sewer line. He indicated that there had not and inspection revealed this to be true. The attendant called Webster Oil Company for an inventory check for any loss of product and their records indicated no losses. Mr. Jack Webster III of Webster Oil Company was contacted by the City. Mr. Webster indicated that he knew of no loss of product at this 1003 S. Glenstone location but that he would have Stoddard Equipment Company perform air tests on the underground tanks and lines at this station.

On October 21, 1981 City personnel observed the air test procedure at 1003 S. Glenstone. At this time it appeared that unleaded gasoline may have been escaping for a long period of time from a pump port that had not been plugged; probably from the time of installation. Retesting was to resume the following day.

Stoddard Equipment returned and retested the entire fuel system at this station. A written notice of their findings was sent to the City. This notice indicated that after the missing $\frac{1}{4}$ inch pump port was plugged, the entire fuel system showed no leaks. Subsequent monitoring in the City sewer for several months following indicated that the problem was dissipating as time elapsed. Monitoring frequency was also decreased as the L.E.L. indications appeared to decrease in magnitude in the City sewer. It was our feeling in mid-1982 that the problem and its source may have been corrected.

However; on October 20, 1982 Surveillance and Enforcement was contacted by Mr. Perry Wingo. He indicated that gasoline odors were being experienced in your home at 1704 E. Grand. City personnel arrived at approximately 12:00 noon and monitored a 100% L.E.L. in a basement floor drain tributary to the 6 inch sewer line aforementioned. City personnel also observed very strong gasoline odors in the living

1003 S. Glenstone

portion of your home. Three subsurface groundwater drains were also found to terminate in the basement floor drain fixture. The presence of gasoline vapors was confirmed in the southeast groundwater drain. Fire Marshal Jim Dancy was called to the scene. Mr. Dancy agreed that gasoline vapors could be entering the residence via these groundwater drains in addition. Mr. Dancy advised plugging the drain and placing a vapor-tight barrier over the floor drain. Mr. Roy Warren, your son-in-law, agreed to do this. Later in the day it was found that the drain had been sealed and the vapors had been eliminated or were undetectable in your home. A 70% L.E.L. was monitored in the City sewer concurrently.

Surveillance and Enforcement personnel contacted Mr. Jack Webster III on October 20, 1982 and informed him of the problem. Mr. Webster offered to again have Stoddard Equipment Company air test the tanks and lines at 1003 S. Glenstone. On October 25, 1982 Mr. Webster reported to Surveillance and Enforcement that the tanks tested out sufficiently but that Stoddard Equipment Company could not hold pressure on two of the product lines. Mr. Webster indicated that the island dispensers had been recently replaced and it appeared that the wrong type of pipe thread sealant had been used in that installation. He apparently did not feel that the integrity of the lines was in question and did not authorize any further testing, according to a Stoddard official.

In addition, Surveillance and Enforcement personnel became aware that there were buried gasoline tanks on the north side of Grand at Ming Auto Center, 959 S. Glenstone. These tanks are no longer in use as they are a remnant from a previous service station operation. Surveillance and Enforcement personnel found on inspection that two tanks appeared to be empty, one had a few inches of gasoline, and one had 3 feet of water and 3 inches of gasoline. Fire Marshal Thurman was advised of the situation on October 22, 1982. Mr. Thurman indicated that the Fire Code calls for removal or filling with sand of fuel tanks when taken out of service. Mr. Thurman indicated that the Fire Department would initiate compliance action to meet that requirement. On

1003 S. Glenstone

occasion, some presence of gasoline vapors have been detected in a City sewer line on the north side of Grand, directly across the street from your residence. This sewer line has no immediate physical connection to the sewer line which serves your home. Continued monitoring of the sewer lines by Surveillance and Enforcement indicated little or no presence of gasoline vapors in the vicinity of your residence during the several weeks following.

On January 15, 1983 the situation apparently again worsened as the Fire Department was called to your residence. Surveillance and Enforcement was notified by the Fire Department of the situation. The City sewer line was flushed by a high velocity sewer flusher. This measure usually is only a very temporary measure and in some instances does not help at all. On January 16, 1983 a 100% L.E.L. was monitored in the City sewer. Again the sewer flusher was used. A 20% L.E.L. was measured in your basement floor drain after flushing. / On January 18, 1983 a 100% L.E.L. was measured in the City sewer, again no reading could be obtained in your basement drain. Mr. Jack Webster III was again contacted and asked to have the fuel system at 1003 S. Glenstone checked. Mr. Webster agreed to do so. At this writing the tests have not been completed. On January 20, 1983 the L.E.L.'s in the City sewer had dropped to 50%-55% of the L.E.L.

Due to the repeated reoccurrence of this problem; Surveillance and Enforcement, pending the outcome of air testing, is planning to require that Webster Oil Company initiate trenching and excavation along their property line at 1003 S. Glenstone. This action could reveal if any gasoline is in the soil on the Webster property and if so, could additionally reveal any movement of gasoline from their property onto yours or into the City sewer system at the rear of your property. A collection system could be constructed on the Webster property for the separation and recovery of any gasoline in the groundwater.

1003 S. Glenstone

For your information, the following opinions of this office are offered:

- (1) Results of air testing of fuel systems of the Webster Station or any other station in the vicinity may not be absolute proof that the gasoline causing the current problem is from a specific source in particular.
- (2) Excavation or trenching could reveal gasoline in the soil on the Webster property. An excavation on any property that has had a service station operating on it for a number of years could reveal the presence of gasoline in the soil. Determining direction of movement of the gasoline can sometimes be very difficult to prove.
- (3) The City has been involved in scores of similar problems throughout the metropolitan area served by City sewer. In many instances no evident source for the problems could be found. Suppositions have ranged from rumors of former, nearby service stations that have been out of business for 30-40 years, to rumors of vehicular accidents 15-20 years ago in which spillage occurred. In most cases there are not sufficient records to either support or dispel the rumors.

(4) If the aforementioned investigative tools prove to be successful and the source of the problem can be found and corrective action is taken, please keep in mind that reoccurrences of this problem could develop from time to time in the months or years ahead. Such reoccurrences may result from fluctuations in the height of the water table. This can vary due to frequency, amount and intensity of rainfall or precipitation. Also, due to the unknown extent, volume and path of movement of the gasoline in soil in the vicinity, it is difficult to predict if, when, or where it may pose a problem again. The varied disturbances of the soil through the years in an urban setting add to the complexities in a problem such as this.

However, please be advised that the City of Springfield is doing and will continue to do all within its power and jurisdiction to try and protect you and your property

1003 S. Glenstone

from any potential hazards like the one you are now experiencing. We will keep you informed of progress as it develops.

If we may answer any questions, please do not hesitate to call.

Yours truly,

David G. Snider

Director of Public Works

cc: Randy Hall, City Councilman
Don Busch, City Manager
Jack Newman, Director of Health
Bill Penland, Fire Chief
Bob Schaefer, Superintendent of Sanitary Services
(3 other copies)

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____

DATE _____ October 29, 1982

DEPARTMENT _____

On October 20, 1982, this office received a phone call from Perry Wingo, informing us of gasoline odors in his father's home, 1704 E. Grand. Randy Lyman and Steve Short arrived at the scene about 12:00 noon. We observed 100% LEL in a basement floor drain. We also observed very strong gasoline odors in the living portion of the home. The windows and doors had been open for 2 hours prior to our inspection. Three, Retrofit, ground water drains terminated in the floor drain fixture. The presence of gasoline vapors was confirmed in the southeast groundwater drain. Fire Marshal Dancy was called due to the seriousness of the situation. Dancy advised plugging off the floor drain clean out and placing a vapor tight barrier over the floor drain. This eliminated the vapors in the home, but 70% LEL was observed in M.H. 51, Wye Map R-13.

This office contacted Jack Webster on October 20, and informed him of the problem. He offered to have Stoddard Equipment air check his tanks and lines. On October 25, Mr. Webster reported Stoddard could not hold pressure on two of the product lines. Jack said the dispensers had been replaced and it appeared the wrong type of pipe dope may have been used.

On the 26th - 29th the LEL in M.H. 51 was about 70% LEL. On the 25th the gas vapor was 100% LEL. This office also investigated the underground gasoline storage tanks at the Ming Auto Center, 959 S. Glenstone. Two tanks appear empty, one has a few inches of product, and one has approximately 3 feet of water and 3 inches of product. Fire Marshal Thurman was advised of this situation on the 22nd. Thurman said the Fire Code calls for removal or filling with sand when tanks are taken out of service, and would initiate compliance action.

SIGNED _____ SDS _____

1003 S. Glenstone

STODDARD EQUIPMENT CO.

LP Gas and Service Station Equipment

Sales and Service

3536 E. SUNSHINE SPRINGFIELD, MISSOURI 65804

November 25, 1981

NOV 30 1981

City of Springfield
Attn: Steve Short
Dept of Public Works
830 Boonville
Springfield, Mo. 65802

Dear Mr. Short,

This letter is to verify that we air tested the fuel system at the Webster Oil Co station at Grand and Glenstone Streets.

The Regular product did not show any leaks in the system. The No-Lead product had a leak in the fuel return section of the air elimination system due to a 1/4" pipe plug that was missing. We replaced the missing plug and retested the system and it showed no leak.

This testing and repair work was done on October 21, 1981 and October 26, 1981.

Sincerely

W. O. Hawkins Jr.

W.O. Hawkins, Jr.
Assistant Manager.

c.c. Jack Webster III

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____

DATE 1/18/83 _____

DEPARTMENT _____

Re: Webster Oil Co.

Steve Short and myself found 100% L.E.L. in M.H. #51 on Wye Map R-13. We got no reading in the drains at 1704 E. Grand. We met with Bob Schaefer and discussed inconclusive testing performed by Stoddard Equipment at Glenstone 66, 1003 S. Glenstone. I called Jack Webster III and requested he have the lines checked for integrity. He indicated he would. I told Mr. Webster that trenching may be necessary regardless of the results of air testing. I told Mr. Webster a meeting would be called to discuss any trenching required. Mr. Roy Warren, Mr. Wingo's son-in-law, called Schaefer and said 'A cork had been blown out of the drain and everything would be alright tonight'. Steve called Dale Bittle and brought him up to date.

J. Randall Lyman
SIGNED _____ Surveillance & Enforcement _____

1003 S. Glenstone

October 21, 1981

Jack Webster III, President
Webster Companies
2400 E. Bennett
Springfield, Missouri 65804

In Re: 1003 S. Glenstone

Dear Mr. Webster:

This letter will confirm the conversation with this office on the sixteenth of this month, concerning gasoline in the sanitary sewer in the 1000 and 1100 blocks South Kentwood.

Our investigation traced the contaminant to a six inch sewer that serves two residences, one restaurant, and the service station operated by your company. The explosive level has reached 100% of the Lower Explosive Limit in one area of our sanitary sewer.

It is our understanding Webster Companies will have Stoddard Equipment Company test product storage and piping as soon as possible.

In regard to your question concerning the source being one of the other nearby stations or possibly some abandoned tanks, we are investigating that possibility but consider it prudent to commence at a point nearest the problem.

This office will continue monitoring our sanitary sewer lines, and searching for a source. We know your company will proceed in a timely manner due to the potential exposure to private and public property.

1003 S. Glenstone

Jack Webster III, President
Page 2
October 21, 1981

If we can be of any assistance, please call 864-1924.

Yours truly,

Stephen D. Short
Water Pollution Control Inspector II
Surveillance & Enforcement

SDS:js

cc: Henry Cole
Robert R. Schaefer

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____

DATE _____ October 21, 1981 _____

DEPARTMENT _____

Randy and I watched Stoddard Equipment test the lines and tanks at the Webster Oil Station, 1003 S. Glenstone.

At this time it appears unleaded may have escaped from a pump port that had not been plugged. Stoddard Equipment plugged the opening and was going to retest the 22nd. We tested the LEL in Kentwood Street and observed little change.

STODDARD - JR. HAWKINS
O.K. ED LINES + TANKS.

SIGNED _____ SDS _____

1003 S. Glenstone

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF _____ FILE _____
DEPARTMENT _____

DATE _____ October 16, 1981

The Fire Department contacted this office about gasoline odors in a basement at 1151 S. Kentwood. We discovered a clean-out plug removed from a floor drain at 1151 S. Kentwood. Our investigation for the source of gasoline lead us to the Phillips 66 at Grant and Glenstone. That station connects to our M.H. 51, wye map R-13 by means of a private 6 inch line. Two homes and one restaurant are also connected to the private line. We observed gasoline in the 6" discharge and 100% L.E.L. readings in the immediate manhole downstream. All the manholes downstream of the aforementioned, to 1151 S. Kentwood had 30% L.E.L. or greater readings.

We contacted Jack Webster III, owner of the station, who told us he knew of no loss of product at the station, but would have Stoddard Equipment check his tanks and lines.

SIGNED _____ Randy Lyman & Stephen Short

1003 S. Glenstone

Effective Rate 1-80 Thereafter

2647 CC7

5

6.55

2642

95 @ 1.13 107.35

2547

200 @ .95 190.00

2347

3 @ .56 168.00

2047 @ .34

695.98

1167.88

CITY of
SPRINGFIELD



JAN 20 1984

January 16, 1984

*Steve
I kept a copy of
this for my
billing file. 6/8*

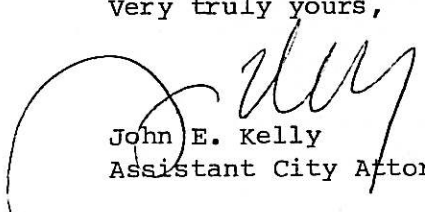
Mr. Mark E. Fitzsimmons
Love and Doran
605 Woodruff Building
P. O. Box 1455 S.S.S.
Springfield, MO 65805

Dear Mark:

I have before me a letter dated April 5, 1983, addressed to you and signed by Stephen Short of the City of Springfield Water Pollution: Control & Surveillance unit. Nothing in my file indicates what your client's position is on this matter, but from the reports it appears that evidence is substantial that Webster Oil's facility caused the subject hydrocarbon leakage into the sewer system.

If your client is not willing to pay for the cleanup cost, kindly advise so we can file suit. Thanks.

Very truly yours,


John E. Kelly
Assistant City Attorney

JEK:sw

cc: Stephen Short

Law Department

830 Boonville Avenue
Springfield, Missouri 65801
(417) 864-1645

1003 S. Glensfane